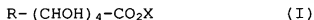


**IN THE CLAIMS**

1. (currently amended) An oxidizing composition for dyeing, bleaching or permanently reshaping hair comprising:

- a) at least one oxidizing agent, and
- b) at least one compound of formula (I):



wherein:

- R is a  $CH_2OH$  or  $CO_2X$  group, and
- X is a hydrogen atom or a monovalent or divalent cation chosen from an alkali metal, an alkaline-earth metal, a transition metal, an organic amine or an ammonium cation;

with the proviso that, when R is a  $CH_2OH$  group, said compound of formula (I) is other than gluconic acid or a salt thereof.

~~wherein said composition is suitable for dyeing, bleaching or permanently reshaping hair.~~

2. (previously presented) The composition of claim 1, wherein said monovalent or divalent metal cation is a monovalent alkali metal cation, a divalent alkaline-earth metal cation, a divalent transition metal cation or a monovalent cation chosen from an organic amine or an ammonium cation.

3. (previously presented) The composition of claim 1, wherein said compound of formula (I) is mannonic acid, altronic acid, idonic acid, galactonic acid, talonic acid, gulonic acid or allonic acid.

4. (previously presented) The composition of claim 1, wherein R is a  $CO_2X$  group.

5. (previously presented) The composition of claim 4, wherein said compound of formula (I) is mucic acid, glucaric acid, mannaric acid, altaric acid, idaric acid, talaric acid, gularic acid or allaric acid, an alkali metal salt thereof, an alkaline-earth metal salt thereof, a transition metal salt thereof, an organic amine salt thereof or an ammonium salt thereof, or a mixture thereof.

6. (previously presented) The composition of claim 5, wherein said compound of formula (I) is mucic acid.

7. (previously presented) The composition of claim 1, wherein said compound of formula (I) is present in an amount of from 0.001% to 10% by weight relative to the total weight of the oxidizing composition.

8. (previously presented) The composition of claim 7, wherein said compound of formula (I) is present in an amount of from 0.001% to 5% by weight relative to the total weight of the oxidizing composition.

9. (previously presented) The composition of claim 1, wherein said oxidizing agent is hydrogen peroxide, urea peroxide, alkali metal bromate, or persalt.

10. (previously presented) The composition of claim 1, wherein said oxidizing agent is present in an amount of from 0.1% to 30% by weight relative to the total weight of the oxidizing composition.

11. (previously presented) The composition of claim 10, wherein said oxidizing agent is present in an amount from 0.5%

to 20% by weight relative to the total weight of the oxidizing composition.

12. (previously presented) The composition of claim 1, further comprising a cationic or amphoteric conditioning polymer.

13. (previously presented) The composition of claim 1, further comprising an amphiphilic polymer which is nonionic, anionic, cationic, or amphoteric, wherein said amphiphilic polymer comprises a hydrophobic chain.

14. (previously presented) The composition of claim 1, further comprising a surfactant.

15. (previously presented) The composition of claim 1, further comprising a rheology modifier other than the amphiphilic polymer of claim 13.

16. (previously presented) The composition of claim 1, further comprising an acidifying or basifying agent.

17. (previously presented) The composition of claim 1, further comprising a solvent.

18. (previously presented) The composition of claim 1, further comprising an adjuvant chosen from a mineral or organic filler, binder, lubricant, antifoam, silicone, dye, matting agent, preserving agent or fragrance.

19. (cancelled)

20. (previously presented) A method of bleaching keratin fibers, comprising the steps of:

- a) applying to said keratin fibers said oxidizing composition of claim 1;
- b) leaving said oxidizing composition on said keratin fibers for a sufficient time to obtain the desired bleaching; and
- c) rinsing said keratin fibers to remove said oxidizing composition therefrom.

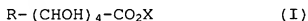
21. (previously presented) A method of dyeing keratin fibers, comprising the steps of:

- a) applying a dye composition to said keratin fibers;
- b) applying said oxidizing composition of claim 1 to said keratin fibers to develop the color;
- c) leaving said oxidizing composition on said keratin fibers for a sufficient time to obtain the desired coloration; and
- d) rinsing the keratin fibers with water to remove said dye composition and said oxidizing composition therefrom.

22. (previously presented) A method of dyeing keratin fibers, comprising the steps of:

- a) mixing a dye composition and the oxidizing composition of claim 1 to create a mixture;
- b) applying said mixture to said keratin fibers;
- c) leaving said mixture to said keratin fibers for a sufficient time to obtain the desired coloration; and
- d) rinsing said keratin fibers with water to remove said mixture therefrom.

23. (previously presented) A kit for dyeing keratin fibers, comprising: at least two compositions A and B intended to be mixed together to obtain a ready-to-use dye composition, wherein said composition A is an oxidizing composition and said composition B is a composition comprising at least one dye, wherein said composition A contains at least one compound of formula (I):



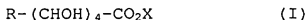
in which:

- R is a  $\text{CH}_2\text{OH}$  or  $\text{CO}_2\text{X}$  group, and
- X is a hydrogen atom or a monovalent or divalent cation chosen from an alkali metal, an alkaline-earth metal, a transition metal, an organic amine or an ammonium cation;

with the proviso that, when R is a  $\text{CH}_2\text{OH}$  group, said compound of formula (I) is other than gluconic acid or a salt thereof.

24. (previously presented) A kit for bleaching keratin fibers comprising: at least two compositions C and D intended to be mixed together to obtain a ready-to-use oxidizing composition, wherein:

- a) at least one of said compositions C and D contains an oxidizing agent, and
- b) at least one of said compositions C and D contains a compound of formula (I):



wherein:

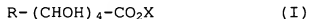
- R is a  $\text{CH}_2\text{OH}$  or  $\text{CO}_2\text{X}$  group, and
- X is a hydrogen atom or a monovalent or divalent cation chosen from an alkali metal, an alkaline-

earth metal, a transition metal, an organic amine or an ammonium cation;

with the proviso that, when R is  $\text{CH}_2\text{OH}$ , said compound of formula (I) is other than gluconic acid or a salt thereof.

25. (previously presented) A kit for permanently reshaping keratin fibers comprising: at least two compositions E and F, wherein

- a) said composition E is an oxidizing composition comprising an oxidizing agent and a compound of formula (I):



wherein:

- R is a  $\text{CH}_2\text{OH}$  or  $\text{CH}_2\text{X}$  group, and;
- X is a hydrogen atom or a monovalent or divalent cation chosen from an alkali metal, an alkaline-earth metal, a transition metal or an organic amine, or an ammonium cation;
- with the proviso that, when R is  $\text{CH}_2\text{OH}$ , said compound of formula (I) is other than gluconic acid or a salt thereof, and

- b) said composition F is a reducing composition.

26. (cancelled)

27. (previously presented) The composition of claim 9, wherein said persalt is perborate, percarbonate, persulphate, or peracid.

28. (previously presented) The composition of claim 12, wherein said cationic or amphoteric conditioning polymer is

present in an amount of from 0.01% to 10% by weight relative to the total weight of said composition.

29. (previously presented) The composition of claim 28, wherein said cationic or amphoteric conditioning polymer is present in an amount of from 0.05% to 5% by weight relative to the total weight of said composition.

30. (previously presented) The composition of claim 13, wherein said amphiphilic polymer is present in an amount of from 0.05% to 20% by weight relative to the total weight of said composition.

31. (previously presented) The composition of claim 30, wherein said amphiphilic polymer is present in an amount of from 0.1% to 10% by weight relative to the total weight of said composition.

32. (previously presented) The composition of claim 14, wherein said surfactant is present in an amount of from 0.01% to 40% by weight relative to the total weight of said composition.

33. (previously presented) The composition of claim 32, wherein said surfactant is present in an amount of from 0.1% to 30% by weight relative to the total weight of said composition.

34. (previously presented) The composition of claim 15, wherein said rheology modifier is present in an amount of from 0.05% to 20% by weight relative to the total weight of said composition.

35. (previously presented) The composition of claim 34, wherein said rheology modifier is present in an amount of from 0.1% to 10% by weight relative to the total weight of said composition.

36. (previously presented) The composition of claim 16, wherein said acidifying or basifying agent is present in an amount of from 0.01% to 30% by weight relative to the total weight of said composition.

37. (previously presented) The composition of claim 17, wherein said solvent is water or a mixture composed of water and a cosmetically acceptable organic solvent.

38. (previously presented) The composition of claim 17, wherein said solvent is present in an amount of from 0.5% to 20% by weight relative to the total weight of said composition.

39. (previously presented) The composition of claim 38, wherein said solvent is present in an amount of from 2% to 10% by weight relative to the total weight of said composition.

40. (previously presented) The composition of claim 1, further comprising a compound selected from the group consisting of:

- a) a cationic or amphoteric conditioning polymer;
- b) an amphiphilic polymer which is non-ionic, anionic or cationic, wherein said amphiphilic polymer comprises a hydrophobic chain;
- c) a surfactant;
- d) a rheology modifier other than the amphiphilic polymer of (b);
- e) a pH modifier; and



f) a solvent.

41. (previously presented) The method of claim 20, further comprising the step of: washing said keratin fibers one or more times, rinsing them after each wash.

42. (previously presented) The method of claim 41, further comprising the step of: drying said keratin fibers.

43. (previously presented) A method of permanently reshaping keratin fibers, comprising the steps of:

- a) applying to said keratin fibers a reducing composition;
- b) leaving said reducing composition on said keratin fibers for a sufficient time to obtain the desired permanent reshaping;
- c) rinsing said keratin fibers to remove said reducing composition therefrom;
- d) applying the oxidizing composition of claim 1 on said keratin fibers for a sufficient time that is sufficient to obtain said desired reshaping;
- e) rinsing said keratin fibers with water to remove said oxidizing composition therefrom.

44. (previously presented) The method of claim 43, further comprising the step of: washing said keratin fibers one or more times, rinsing them after each wash.

45. (previously presented) The method of claim 44, further comprising the step of: drying said keratin fibers.